

I. LISTING OF THE CLAIMS

1. (Canceled) A method of programming an infertility treatment cycle comprising controlled ovarian stimulation (COS) and assisted reproductive techniques (ART), the method comprising the following steps:

a) programming the start of a programmed menstrual cycle by inducing luteal regression in an infertile patient by administering an LHRH antagonist during the luteal phase of the preceding menstrual cycle,

wherein the LHRH antagonist is selected from the group consisting of cetrorelix, teverelix, ganirelix, antide, and abarelix, and further wherein the LHRH antagonist is administered at a dosage range between 0.5 mg to 10 mg;

b) terminating administration of the LHRH antagonist prior to the onset of menses;

c) programming controlled ovarian stimulation by stimulating ovarian follicle growth by administering a compound selected from the group consisting of urinary FSH, recombinant FSH, HMG, recombinant LH, clomiphene, or a combination thereof, during the follicular phase of the programmed menstrual cycle;

d) suppressing premature ovulation by administering a LHRH antagonist selected from the group consisting of cetrorelix, teverelix, ganirelix, antide, and abarelix during the follicular phase of the programmed menstrual cycle;

e) inducing ovulation by administering HCG; and

f) applying assisted reproduction techniques.

2-3. (Cancelled)

4. (Currently amended) The method of claim [[1]] 26, wherein ~~the programmed menstrual cycle of step (a) is programmed on a day that permits the said~~ assisted reproduction techniques ~~of step (f) to be~~ are carried out during routine operations of laboratories, clinics, hospitals or other assisted reproduction facilities.

5. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said second dose administers cetorelix.

6. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said second dose administers teverelix.

7. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said second dose administers ganirelix.

8. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said second dose administers antide.

9. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said second dose administers abarelix.

10-15. (Cancelled)

16. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said first dose administers cetorelix.

17. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said first dose administers teverelix.

18. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said first dose administers ganirelix.

19. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is~~ said first dose administers antide.

20. (Currently amended) The method of claim [[1]] 26, wherein ~~the LHRH antagonist of step (e) is said first dose administers~~ abarelix.

21. (Currently amended) The method of claim [[1]] 28, wherein ~~[[the]]~~ said follicle stimulating compound of step (e) is selected from the group consisting of urinary FSH, recombinant FSH, HMG, recombinant LH, or a combination thereof.

22. (Currently amended) The method of claim [[1]] 28, wherein ~~[[the]]~~ said follicle stimulating compound of step (e) is clomiphene.

23. (Currently amended) The method of claim [[1]] 28, wherein said ovarian stimulation is achieved ~~with a combination~~ by administration of antioestrogens and gonadotropins.

24. (Currently amended) The method of claim [[1]] 28, wherein said ovarian stimulation is achieved ~~with a combination~~ by administration of clomiphene and gonadotropins.

25. (Currently amended) The method of claim [[1]] 28, wherein said assisted reproduction techniques comprise ~~comprises~~ applying IVF, ICSI, GIFT, ZIFT or intrauterine insemination via sperm injection.

26. (New) A method of programming an infertility treatment cycle comprising controlled ovarian stimulation (COS) and assisted reproductive techniques (ART), the method comprising:

- determining a luteal phase of a first menstrual cycle in an infertile patient;
- administering a first dose regimen of an LHRH antagonist during said luteal phase of said first menstrual cycle, wherein said first dose regimen of LHRH antagonist induces a luteal regression;
- terminating said first dose regimen administration prior to the onset of menses;

determining a follicular phase of a second menstrual cycle wherein said second menstrual cycle immediately succeeds said first menstrual cycle;

administering a follicle stimulating compound during said follicular phase, wherein said follicle stimulating compound stimulates ovarian follicle growth;

administering a second dose regimen of said LHRH antagonist during said follicular phase, wherein said second dose regimen of an LHRH antagonist suppresses premature ovulation;

administering HCG thereby inducing ovulation; and

applying assisted reproduction techniques.

27. (New) A method of programming an infertility treatment cycle according to Claim 26, wherein said LHRH antagonist is selected from the group consisting of cetrorelix, teverelix, ganirelix, antide, and abarelix.

28. (New) A method of programming an infertility treatment cycle according to Claim 26, wherein said follicle stimulating compound is selected from the group consisting of urinary FSH, recombinant FSH, HMG, recombinant LH, clomiphene, or a combination thereof.